

Making an Impact Through Technical Assistance



*Combined SCFA/DDFA
FY 2002 Mid-Year Review*

*Salt Lake City, UT
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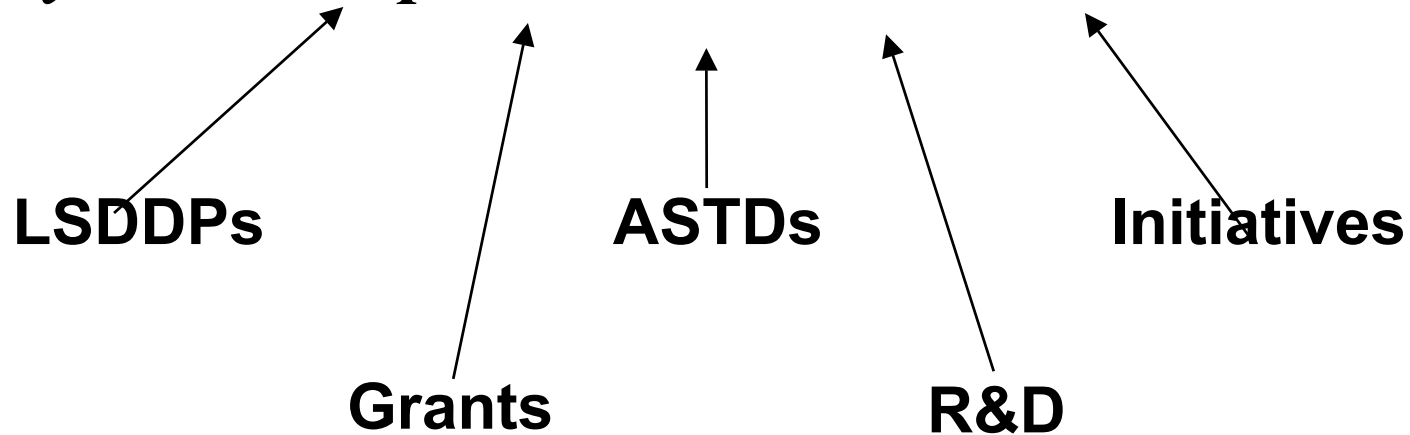
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Senior Management & Technical Advisor



DDFA Mission

Identify, develop, demonstrate, and assist in the deployment of improved D&D technology systems and processes.



Technical Assistance



Completed Technical Assistance

Pollution Prevention Assessments

- BGRR Decommissioning Project
- INTEC Liquid Waste Reduction Project

Value Engineering Studies

- West Valley
- Ashtabula D&D
- Demolition of Mound Stacks
- Mound Old Cave
- Ashtabula PCB

Resolution of Site Specific Issues

- Rocky Flats Glovebox decommissioning
- Tokomak Fusion Test Reactor decommissioning
- Oak Ridge Contaminated Duct Characterization
- Columbus Environmental Management Project Baseline Review



Current Efforts in Technical Assistance

World Trade Center/Pentagon Cleanup

- DDFA technologies used in cleanup efforts

Hanford's Plutonium Finishing Plant (PFP)

- Assist in the characterization and decommissioning

Separations Process Research Unit (SPRU)

- Cooperative effort with TFA and SCFA for characterization

Portsmouth Gaseous Diffusion Plant

- Assist in developing decommissioning plan

International Activities



Technical Assistance For New S&T Thrusts

- **Closure Sites** – Ensure that closure sites have necessary technology and technical support to meet closure schedules (Rocky Flats and Ohio Projects)
- **Alternative Approaches to Current High Cost/High Risk Projects** – Ensure reasonableness of costs and schedules by identifying technology areas where greatest benefits can be realized through an aggressive investment strategy



High Risk/High Cost Problems

Facility Type	Problem	Sites with Issue
Hot Cell Facilities	High RAD. Storage practices have resulted in congested and extremely dangerous environments	Hanford's 300 Area, West Valley, LANL, INEEL
Plutonium Processing Facilities	Disposition involves thousands of gloveboxes and miles of contaminated piping. Kg's of Pu	Hanford's 200 Area, Rocky Flats 776/777, LANL, SRS
Canyon Facilities	Separation processing facilities (canyons) are large and highly contaminated. Extensive S&M	Hanford SRS
Gaseous Diffusion Plants	Majority of "legacy" material is inventoried at GDP's. D&D will generate large volumes of waste	Oak Ridge K-25/27, Portsmouth, Paducah



Areas of Expertise

The breadth of our capabilities and expertise in providing assistance is greatly enhanced through collaboration

- Cost/Performance Analysis
- Technical Needs Assessment
- Characterization Planning
- Remote Systems Applications
- Identification and Assessment of Improved Technologies
- Hands on D&D
- Health and Safety
- D&D Planning
- Regulatory Assistance

... and Technical Assistance Can Be Requested From www.netl.doe.gov/dd



Partnering Is Integral to Success

**U.S. Army Corps
of Engineers**

**DOE/Utility D&D
Consortium**

**University
Grants**

**International
Program**

**RSM Center
of Excellence**

DDFA

National Labs

EM-20/30/40

**DDFA Steering
Committee**

Other Focus Areas

**Industry
Partnerships**

**International Union of
Operating Engineers**



D&D Technology Internet Data Sources

- D&D Information System

www1.undeerc.org/scripts/ddis/

- NETL D&D Focus Area

www.netl.doe.gov/dd

- FIU-HCET

www.hcet.fiu.edu/r&d/d&d/



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EXTRA SLIDES



Examples from Closure Sites (continued)

Ohio Projects

As the Ohio Projects progress towards closure, technology improvements will become more critical to success... Susan Brechbill, Manager

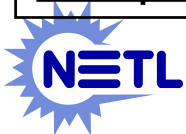
Mound

Status – More than 1/3 of Mound's 145 buildings have been demolished or removed

Recent Success through technology support of needs

- Nochar – Demo'd at Mound in 1999, this technology is being deployed everywhere there seems to be a contaminated oil problem... Rocky FlatsAECL, Russia, Romania. It offers a solution where there was none!

Focus Area support is helping to advance safety, efficiency and schedule compression



Examples from Closure Sites

Rocky Flats

Status - One nuclear facility demolished and five others in various stages of deactivation, decontamination or decommissioning

Recent Success through technology support of needs

- External rad characterization
- Liquid chemical decontamination of gloveboxes
- \$40 million in cost avoidance... 6 mos. positive schedule variance (August through November)

FY02 - 03 seen as a “critical period” for greatest impact





Some Examples of Current Efforts in Technical Assistance (continued)

Oak Ridge Duct Characterization

- Assisted in identifying technologies that might support characterization of ducts contaminated with U, Pu, and explosives

Portsmouth Gaseous Diffusion Plant (GDP)

- Commented on possible approaches to the D&D of GDP

Brookhaven National Laboratory

- Assist in identifying approaches and technologies for the disassembly of boral and steel sheets surrounding the core of their medical research reactor

International Support



Additional Notes

